ABSTRACT

A high-strength and highly-wear-resistant sintered diamond object according to the present invention includes sintered diamond particle having an average particle size of not larger than 2μm and a binder phase as a remaining portion. The content of the sintered diamond particle in the sintered diamond object is not smaller than 80 volume % and not larger than 98 volume %. The binder phase contains at least one element selected from the group consisting of titanium and the like, of which content is not smaller than 0.5 mass % and less than 50 mass %, and contains cobalt, of which content is not smaller than 50 mass % and less than 99.5 mass %. A part of the element or the element as a whole is present as carbide particle having an average particle size of not larger than 0.8μm. A texture of the carbide particle is discontinuous, and adjacent diamond particles are bound to each other. The sintered diamond object attaining excellent wear resistance, chipping resistance, shock resistance, and thermal conductivity can thus be obtained.